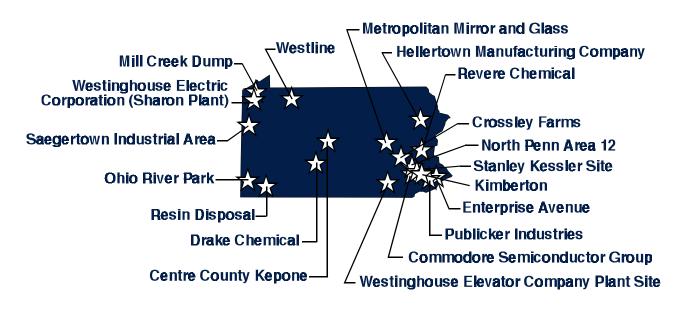


## Returning Sites To Productive Use

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# Pennsylvania Superfund Success Stories





#### Centre County Kepone

The 32-acre Centre County Kepone Superfund site in State College, Pennsylvania, is an active chemical manufacturing facility. Since 1958, organic chemicals have been produced during the manufacture of pharmaceutical products, agricultural chemical products, metal plating, and plastics. For nearly 20 years, wastewater and sludge were put in drums and dumped in lagoons. Investigations by the state and EPA found that hazardous materials had leached through the lagoons, and had contaminated groundwater, soil, surface water, and drainage ditch sediments. In 1982, the land owners excavated and removed contaminated material from lagoons, removed drums and contaminated soil from the drum storage area, and disposed of the waste in an off-site landfill. In 1983, EPA added the site to its list of hazardous waste sites



needing cleanup. At the same time, a developer was considering using the property next to the site to build the new Nittany Shopping Center. However, to provide sidewalks and vehicle access to the shopping center, the developer needed to use a portion of the Centre County Kepone site. In 1998, the developer cleaned up and transformed a portion of an on-site drainage ditch into a storm drainage system, sidewalk, and vehicle access lane. The shopping center includes Pep Boys, Giant Supermarket, and Office Max, and employs at least 300 people. The chemical manufacturing facility continues to operate, and the cleanup of the remainder of the site is expected to begin in the summer of 1999.

#### Commodore Semiconductor Group

When the Commodore Semiconductor Group closed its manufacturing plant in 1992, the town of Norristown, Pennsylvania, felt the impact. With the discovery of extensive contamination from leaking underground storage tanks at the facility, the town also faced the prospect that the property would never be used again. In 1989, EPA added the site to its list of hazardous waste sites needing cleanup. Once the site was listed, EPA, the State of Pennsylvania, Commodore Semiconductor, and previous owners worked together to clean up contaminated soil and groundwater. Although the Commodore Semiconductor Group declared bankruptcy, the company continued to maintain the equipment and systems at the plant, ensuring that the facility would not fall into disrepair



and would remain attractive to a potential buyer. When GMT Electronics decided to buy the property, it approached EPA about a Prospective Purchaser Agreement that would limit the company's liability in exchange for sharing the costs of cleanup. With the agreement in place, GMT Electronics bought the land and the plant, and started operations. Today, GMT Electronics is a thriving business that provides over 100 jobs.

## Crossley Farms

The 24-acre Crossley Farm Superfund site sits atop Blackhead Hill, in Hereford Township, Pennsylvania. From the mid-1960s to the mid-1970s, a local plant, the Bally Case and Cooler Co., reportedly sent numerous drums of mostly liquid waste to the Crossley Farm for disposal. The plant is believed to have used trichloroethylene as a degreaser until 1970. A 1983 investigation conducted by the Pennsylvania Department of Environmental Resources found that residential wells near the site were contaminated with the hazardous chemicals. Hazardous waste was also found in the soil and sediment. In 1992, EPA added the site to its list of hazardous waste sites needing cleanup. EPA, the state and the parties responsible for the contamination developed a plan to clean up the site that allowed the farm to stay open. The state issued a health advisory for the use of contaminated wells, and provided water to residents who depended on the wells. Also, over 1,000 buried drums and contaminated soil were removed. This site has been cleaned and restored to its original state. Crossley Farm remained open during the cleanup, and continues to operate today.

#### Drake Chemical

The Drake Chemical Superfund site in Lock Haven, Pennsylvania, operated as a chemical plant, manufacturing chemical intermediates for pesticides and other organic compounds. Operations started in the 1960s and ended in the fall of 1981. The site contained six major buildings, including former offices, production facilities, and a wastewater treatment building. Contamination at the site was extensive. Chemical sludge and contaminated soils were everywhere. In addition, air, groundwater, and various structures on the site were contaminated. In 1982, EPA removed 1,700 exposed drums and drained chemical tanks. In 1983, EPA added the site to its list of hazardous waste sites needing cleanup, and developed a plan for cleanup. Although the soil and sludge contamination is still being incinerated on site, Drake Chemical has reopened and employs 40 people.

## Enterprise Avenue

Thanks to a new runway built on a cleaned up Superfund site, travelers using the Philadelphia International Airport will have easier commutes. During the mid-1970s, the City of Philadelphia used its Enterprise Avenue property to dispose of incineration residue, fly ash, and bulky debris. Also, several waste handling firms used it to illegally bury drums containing industrial and chemical wastes. In 1983, EPA added Enterprise Avenue to its list of hazardous waste sites needing cleanup. The city removed the contaminated soil and placed a protective cover over the site. In 1986, EPA deleted the site from the list. In the mid-1990s, the Philadelphia Department of Aviation began building a new commuter runway for the airport over a portion of the site to reduce flight delays and traffic congestion, and save the airport \$70 million a year. The runway will be completed in the year 2000.



## Hellertown Manufacturing Company

The Hellertown Manufacturing Company in Hellertown, Pennsylvania, manufactured spark plugs from 1930 to 1975. It disposed of its manufacturing wastes, including trichloroethylene, zinc plating waste, chrome dip waste, cleaners, and cutting oils, in unlined lagoons. In 1985, the Pennsylvania Department of Environmental Resources determined that soil and groundwater at the site were contaminated. In 1989, EPA added the site to its list of hazardous waste sites needing cleanup. EPA designed and built an impermeable cap for the former lagoon area to prevent further contamination, and constructed a groundwater treatment system. Although the groundwater treatment continues, the above-ground area at the site has been cleaned up sufficiently to protect human health and the environment. A small business occupies the location, providing jobs for the local community.

#### Kimberton

From 1947 to 1959, residues from manufacturing operations were dumped into eight on-site lagoons on the Kimberton property just outside Philadelphia. During routine water quality testing procedures in 1981, a private well on the property was found to be contaminated with various chemicals, including trichloroethene, dichloroethene, and vinyl chloride. EPA investigated the area and discovered that the soil and surface water were also contaminated. In 1983, EPA added the 10-acre site to its list of hazardous waste sites needing cleanup. Under a plan developed by EPA and the state, the responsible parties removed the contaminated soil and 57 drums, then covered the area with clean soil and reseeded. They provided drinking water to 25 residential and commercial customers, until a permanent waterline was installed. An asphalt coatings manufacturing plant is now operating on the site.

## Metropolitan Mirror and Glass

The Metropolitan Mirror and Glass, Inc., Superfund site is in an industrial area of Frackville, Pennsylvania. The firm manufactured mirrors from 1959 until 1982, when it declared bankruptcy. Wastes from the use of silver solutions, paint strippers, paint thinner, and other solvents were dumped into on-site lagoons. Aluminum, heavy metals, such as silver and lead, and volatile organic compounds were found in soil and groundwater. In 1992, EPA added the site to its list of hazardous waste sites needing cleanup. The site was cleaned up between 1997 and 1998. During the cleanup, the property was being productively used by St. Jude Polymer Company, a plastics recycling firm.

## Mill Creek Dump

The 84-acre Mill Creek Dump Superfund site is a former freshwater wetlands that was used as a dump for foundry sands, solvents, waste oils, and other industrial and municipal waste. Located just two miles west of Erie, Pennsylvania, this former toxic waste site has been transformed into a verdant golf resort. In 1984, after the contamination from the landfill was discovered, EPA added the site to its list of hazardous waste sites needing cleanup. The Agency worked with the Millcreek Township and companies responsible for the contamination to plan a cleanup that would support the development of the golf course. In 1996, EPA modified the original cleanup plan by changing the cap design, and by constructing flatter slopes on the landfill to better accommodate construction of the golf course over the cap. The reuse of this site was made possible by the partnership between EPA and the township. The golf course will open in the summer of 1999.



#### North Penn Area 12

Transicoil, Inc., manufactured electric motors on the 20-acre property now known as the North Penn Area 12 Superfund site in Worcester, Pennsylvania. Beginning in the 1950s, the company used trichloroethene (TCE) in its operations and disposed of the solvent and waste oils in an underground storage tank. In 1979, the state discovered trichloroethylene in the groundwater and, in 1990, EPA added the site to its list of hazardous waste sites needing cleanup. EPA ensured that nearby homes where drinking water was threatened by contamination were equipped with filters to remove any contaminants. Transicoil removed the underground storage tank to prevent further contamination. EPA is extending the clean public water supply to the affected area, and building a groundwater treatment system. Through a Prospective Purchaser Agreement with EPA, the new owner is developing the site without being held responsible for pre-existing contamination. New buildings will be constructed for a tool catalog sales distribution operation, which will employ 180 people.

#### Ohio River Park

The 32-acre Ohio River Park Superfund site in Neville Island, Pennsylvania, is being transformed into a multimillion dollar sports and entertainment complex. A municipal landfill operated on the property from the 1930s until the 1950s. From 1952 to the mid-1960s, the Pittsburgh Coke & Chemical Company disposed of industrial waste on the property, causing widespread contamination of the soil, surface water, and groundwater. In 1990, EPA placed the site on its list of hazardous waste sites needing cleanup. Under EPA's supervision, the property owner placed a protective cover over the landfill. Upon completion of Neville's Island Sports Complex, visitors will be able to enjoy skating, soccer, lacrosse, baseball, a theater complex, a restaurant, a golf driving range, and numerous walking, hiking, and biking trails.



#### Publicker Industries

The Publicker Industries Superfund site located along the banks of the Delaware River is being converted into a major port terminal facility that will expand Philadelphia's commercial trade and tourist industries. The Publicker Industries site was once known as the worst hazardous waste site in the Mid-Atlantic region due to the contamination left behind from 75 years of alcohol distillation processing. In 1989, EPA added the site to its list of hazardous waste sites needing cleanup. Once EPA designed the cleanup plan, they teamed with the state and finalized an



agreement with a private developer that limits the developer's liability for existing contamination. In exchange, the developer has agreed to help pay for the cleanup and will prepare the site for the redevelopment of the \$250 million multi-purpose shipping terminal.

## Resin Disposal

The Resin Disposal Superfund site in Jefferson Borough, Pennsylvania, was formerly a 26-acre strip mine which was converted to a landfill. The landfill was owned and operated by the Pennsylvania Industrial Chemical Company, and received over 85,000 tons of industrial waste, including benzene and toluene. EPA found contamination in the soil, groundwater and surface water, and in 1983, placed the site on its list of hazardous waste sites needing cleanup. EPA, the state, and the parties responsible for the contamination developed a cleanup plan which included covering the contaminated areas with a protective multi-layer cap, and placing a fence around the perimeter of the landfill. Leachate collected from the landfill was directed to an oil/water separator, and the oil was recycled as fuel for the nearby Hercules Jefferson plant. The cleanup is complete, and the owner is turning the site into a sanctuary for migratory birds and native wildflowers.



#### Revere Chemical

Campers, swimmers, and nature enthusiasts are flocking to the forests and rivers of Nockamixon, Pennsylvania, an area that was once a chemical dumping ground. For years, Revere Chemical Co. operated an acid and metal-plating waste processing facility there. The company stored hazardous wastes on their property in drums, piles, and unlined earthen pits. These wastes eventually contaminated the surrounding soils, groundwater, and Rapp Creek, which flows through the heart of Nockamixon. In 1987, EPA added the 113-acre site to its list of hazardous waste sites needing cleanup. EPA worked with the Pennsylvania Department of Health and the Revere Steering Committee, a group of 12 companies responsible for the contamination, to get the site cleaned up and ready for reuse. They installed a cap



over the contamination and planted wildflowers and other warm season foliage on top of the cap. In September 1998, the cleanup was completed. The teamwork among EPA, the state, and the steering committee restored this land, now home to a diverse array of migratory birds, butterflies, and wildlife.

## Saegertown Industrial Area

For the past 40 years, a number of companies operated at the 100-acre Saegertown Industrial Area Superfund site in Saegertown, Pennsylvania. General American Transportation Corporation (GATX) cleaned and repaired railroad tank cars

from the mid-1950s to 1965. The Lord Corporation produced adhesives, urethane coatings, and "rubber chemicals." The Saegertown Manufacturing Co. began producing small steel components in 1965, and continues to do so today. Spectrum Control, Inc., manufactured ceramic capacitors. In 1980, the state discovered volatile organic compounds in Saegertown Municipal Water Authority's Well #2. Operations at all of the above businesses may have contributed to the contamination. In 1980, a fence was erected around a contaminated pond on the GATX portion to prevent trespassers, on-site workers, and residents from coming into contact with the waste. In 1990, EPA added the site to its list of hazardous waste sites needing cleanup. After the site was listed, EPA selected cleanup actions for the groundwater, sludge, and soil contamination. Over 32,000 tons of soil and sludge were removed from the GATX area for treatment and disposal. The land was then backfilled with clean soil and seeded. Groundwater treatment is currently underway. Due to EPA's cleanup plan, the Lord Corporation has been able to continue operating during the cleanup.

## Stanley Kessler Site

Everything is business as usual for the Stanley Kessler Company, in Montgomery County, Pennsylvania. This company operates a welding wire degreasing and repackaging business. During operations, solvent degreasers ran into floor drains that fed into an underground septic tank, and then to a cesspool without a structural bottom. In 1979, contaminants were detected in the Upper Merion Reservoir about a half mile north of the site. The reservoir is a major source of water for the Philadelphia Suburban Water Company, provides drinking water to 800,000 people. In 1983, EPA added the site to its list of hazardous waste sites needing cleanup. With the help of the state, and the parties responsible for the contamination, EPA developed a plan to clean the site and allow the Stanley Kessler Company to remain open, and provide a healthy working environment for employees.

## Westinghouse Electric Corporation (Sharon Plant)

The 58-acre Westinghouse Electric Corporation site in Sharon, Pennsylvania, was used to manufacture electrical transformers. Solvents from the manufacturing process contaminated surface water and groundwater with PCBs and trichlorobenzene. In 1986, EPA placed the site on its list of hazardous waste sites needing cleanup. EPA, the Pennsylvania Department of Environmental Resources, and the parties responsible for the contamination, cleaned up the site, restoring it to productive use. Half of the property is owned and used by Westinghouse, and the remaining portions are owned and used by Winner International, manufacturer of the anti-auto theft device, "The Club," and Armco Steel which operates a tubular products warehouse.

## Westinghouse Elevator Company Plant Site

For more than 30 years, elevators and moving stairways have been manufactured at the Westinghouse Elevator Company Plant in Gettysburg, Pennsylvania. The plant was built in 1968, and taken over by Schindler Elevator Corporation in 1989, which now leases the facilities. In 1986, after years of solvent spills had contaminated area groundwater, EPA added the site to its list of hazardous waste sites needing cleanup. In one on-site well, trichloroethylene, exceeded safe drinking water levels by a factor of 8,000. The site significantly affected the placement of new municipal wells to serve the rapidly developing Gettysburg area. To stop the spread of groundwater contamination, EPA ordered Westinghouse to install a full-scale groundwater pump and treatment system. The system is now operating, and will continue to operate until groundwater is restored to drinking water standards. Schindler Elevator now employs 350 people at its Gettysburg plant, and has annual sales of \$27 million.

#### Westline

For more than 40 years, the Westline Inn has been a McKean County, Pennsylvania, landmark. Few would suspect that the Inn, known for its fine food and rural atmosphere, was on property that once was a hazardous waste site. From 1901 to 1952, the Day Chemical Company converted lumber into charcoal, methanol, and acetic acid. The plant changed owners three times before equipment deterioration and declining profits forced its closure in 1952. The Westline Inn opened in the old house on the site, but in the early 1980's, EPA discovered toxic tar deposits from the former wood chemical operations. EPA immediately removed exposed tar, and added the site to its list of hazardous waste sites needing cleanup. EPA worked with the local community to develop a cleanup plan, which included removing several additional tar deposits and monitoring groundwater. Cleanup was completed in 1990. In 1992, after an investigation showed that the remedy was protective of human health and the environment, EPA removed the site from its list. The Westline Inn continued to operate throughout the cleanup, and remains one of McKean County's most popular tourist attractions.

#### For More Information

To learn more about the positive economic, environmental, and social impacts that have occurred at individual recycled Superfund sites, please write to **reuse.info@epa.gov** or contact:

#### Melissa Friedland

Office of Emergency and Remedial Response U.S. Environmental Protection Agency (703) 603-8864

Or visit the EPA Superfund Program's web site at: http://www.epa.gov/superfund/accomp/redevelop

To learn more about the redevelopment or reuse of Superfund sites, write to reuse.info@epa.gov, or call the Superfund Hotline at 800-553-7672 or (703) 412-3323 (Washington, DC area).